

What is claimed:

1. A method for attaching a universal serial bus network adapter supporting both a remote network drive interface specification and a non-network drive interface specification , comprising the steps of:

providing two universal serial bus configurations to a universal serial bus network;

receiving by a network adapter a first request from a host;

returning a remote network drive interface specification configuration from the network adapter;

receiving by the network adapter a second request from a host, when there is an indication of multiple support configurations;

returning a non-remote network drive interface specification configuration from the network adapter;

parsing all the received configuration to determine the configuration supported by the device;

selecting by the host the configuration that matches a client driver;

2. The method of claim 1, wherein the client driver is a remote network drive interface specification (RNDIS).

3. The method of claim 1, wherein the client driver is a communications data class Ethernet (CDC-Ethernet).

4. The method of claim 1, wherein the network adapter determines whether any sub-system that corresponds to any configuration is currently active.

5. The method of claim 1, wherein the network adapter determines whether the active configuration matches the currently active sub-system, the method further comprising issuing a command to disable the sub-system when there is no match, and issuing a command to activate a new sub-system corresponding to the new configuration selected by the host.

7. A method for attaching universal serial bus devices network adapter supporting both remote network drive interface specification and non-network drive interface specification , comprising the steps of:

plugging a network device into a universal serial bus port on a host;

detecting the network device by the host;

issuing a universal serial bus reset to the network device by the host;

resetting the state of the network device;

issuing by the host a command enabling the network device to communicate on the universal serial bus;

issuing by the host a command enabling to retrieve device descriptors from the network device;

returning by the network device a device descriptor indicating its function; and

issuing by the host configuration commands, whereby, the network device returns a list of descriptors.

8. The method of claim 7, wherein the resetting of the state of the network device involves disabling one of a remote network drive interface specification (RNDIS) and a communications data class Ethernet (CDC-Ethernet).
9. The method of claim 7, wherein the list of descriptors for the configuration commands are for a remote network drive interface specification (RNDIS) or a communications data class Ethernet (CDC-Ethernet).
10. The method of claim 7, wherein the host discards the configuration for a remote network drive interface specification (RNDIS).
11. The method of claim 7, wherein the host accepts the configuration for the communications data class Ethernet (CDC-Ethernet).
12. The method of claim 7, wherein the host issues a configuration to the device to use the communications data class Ethernet (CDC-Ethernet) configuration.
13. An apparatus for attaching universal serial bus devices network adapter supporting both remote network drive interface specification and non-network drive interface specification , comprising the steps of:
 - a universal serial bus network to receive two universal serial bus configurations;
 - a host to receive a first request from a network adapter;
 - a network adapter for returning a remote network drive interface specification configuration;
 - the network adapter receiving a second request from a host, when there is an indication of multiple support configurations;
 - means for parsing all the received configuration to determine the configuration supported by the device; and

the host selecting the configuration that matches a client driver.

14. The apparatus of claim 13, wherein the client driver is a remote network drive interface specification (RNDIS).

15. The apparatus of claim 13, wherein the client driver is a communications data class Ethernet (CDC-Ethernet).

16. The apparatus of claim 13, wherein the network adapter determines whether any sub-system corresponds to any configuration is active.

17. The apparatus of claim 13, wherein the network adapter determines whether the active configuration matches the currently active sub-system, issues a command to disable the sub-system when there is no match, and issues a command to activate a new sub-system corresponding to the new configuration selected by the host.

18. An apparatus for attaching a universal serial bus network adapter supporting both remote network drive interface specification and non-network drive interface specification, comprising the steps of:

a network device for plugging into a universal serial bus port on a host;

a host for detecting the network device, and for issuing a universal serial bus reset to the network device by the host, and resetting the state of the network device;

a host for issuing a command enabling the network device to communicate on the universal serial bus;

a host for issuing a command enabling to retrieve device descriptors from the network device;

a network device for returning a device descriptor indicating its function; and

a host issuing configuration commands, whereby, the network device returns a list of descriptors.

19. The apparatus of claim 18, wherein the resetting of the state of the network device involves disabling one of a remote network drive interface specification (RNDIS) and a communications data class Ethernet (CDC-Ethernet).

20. The apparatus of claim 18, wherein the list of descriptors for the configuration commands are for a remote network drive interface specification (RNDIS) or a communications device class Ethernet (CDC-Ethernet).

21. The apparatus of claim 18, wherein the host discards the configuration for a remote network drive interface specification (RNDIS).

22. The apparatus of claim 18, wherein host accepts the configuration for the communications data class Ethernet (CDC-Ethernet).

23. The apparatus of claim 18, wherein the host issues a configuration to the device to use for the communications data class Ethernet (CDC-Ethernet).

24. A system for attaching a universal serial bus network adapter supporting both remote network drive interface specification and non-network drive interface specification, comprising the steps of:

providing two universal serial bus configurations to a universal serial bus network;
receiving by a network adapter a first request from a host;
returning a remote network drive interface specification configuration from the network adapter;

receiving by the network adapter a second request from a host, when there is an indication of multiple support configurations;

returning a non-remote network drive interface specification configuration from the network adapter;

parsing all the received configuration to determine the configuration supported by the device; and

selecting by the host the configuration that matches a client driver.

25. The system of claim 24, wherein the client driver is a remote network drive interface specification (RNDIS).

26. The system of claim 24, wherein the client driver is a communications data class Ethernet (CDC-Ethernet).

27. The system of claim 24, wherein the network adapter determines whether any sub-system that corresponds to any configuration is active.

28. The system of claim 24, wherein the network adapter determines whether the active configuration matches the currently active sub-system, the method further comprising issuing a command to disable the sub-system when there is no match, and issuing a command to activate a new sub-system corresponding to the new configuration selected by the host.

30. A system for attaching a universal serial bus network adapter supporting both remote network drive interface specification and non-network drive interface specification , comprising:

a network device plugged into a universal serial bus port on a host;

the host detecting the network device;

the host issuing a universal serial bus reset to the network device to reset the state of the network device;

the host issuing a command to enable the network device to communicate on the universal serial bus;

the host issuing a command to retrieve device descriptors from the network device;

the host receiving a device descriptor listing indicating its function from the network device; and

the host issuing configuration commands, whereby, the network device returns a list of descriptors.

31. The system of claim 30, wherein the resetting of the state of the network device comprises disabling one of a remote network drive interface specification (RNDIS) and a communications data class Ethernet (CDC-Ethernet).

32. The system of claim 30, wherein the device descriptor listing for the configuration commands are for a remote network drive interface specification (RNDIS) or a communications data class Ethernet (CDC-Ethernet).

33. The system of claim 30, wherein the host discards the configuration for a remote network drive interface specification (RNDIS).

34. The system of claim 30, wherein the host accepts the configuration for the communications data class Ethernet (CDC-Ethernet).

35. The system of claim 30, wherein the host issues a configuration to the device to use the communications data class Ethernet (CDC-Ethernet) configuration.

36. A computer-readable media containing a computer-executable program for attaching a universal serial bus network adapter supporting both remote network drive interface specification and non-network drive interface specification, the program comprising:

one or more instructions for issuing a universal serial bus reset to the network device by the host;

one or more instructions for resetting the state of the network device;

one or more instructions for issuing by the host a command enabling the network device to communicate on the universal serial bus;

one or more instructions for issuing by the host a command enabling to retrieve device descriptors from the network device;

one or more instructions for returning by the network device a computer code device descriptor indicating its function; and

one or more instructions for issuing by the host configuration commands, whereby, the network device returns a list of descriptors.

37. The computer-readable media of claim 36, wherein the one or more instructions for resetting of the state of the network device further comprises one or more instructions for disabling one of a remote network drive interface specification (RNDIS) and a communications data class Ethernet (CDC-Ethernet).

38. The computer-readable media of claim 36, further comprising one or more instructions for discarding the configuration for a remote network drive interface specification (RNDIS).

39. The computer-readable media of claim 36, further comprising one or more instructions for accepting the configuration for the communications data class Ethernet (CDC-Ethernet).

40. The computer-readable media of claim 36, further comprising one or more instructions for issuing a configuration code instructing the device to use the communications data class Ethernet (CDC-Ethernet) configuration.